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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | ATTORNEY DOCKET NO. CONFIRMATION NO. | |
|--|-------------|----------------------|---------------------|--------------------------------------|--|
| 10/532,529 | 08/23/2005 | Ralf Dunkel | CS-848/LeA 36186 | 5968 | |
| 34469 7590 12/14/2007 BAYER CROPSCIENCE LP Patent Department 2 T.W. ALEXANDER DRIVE RESEARCH TRIANGLE PARK, NC 27709 | | | EXAMINER | | |
| | | | BARKER, MICHAEL P | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 1626 | | |
| | | | | | |
| | | | MAIL DATE | DELIVERY MODE | |
| | | | 12/14/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| | 10/532,529 | DUNKEL ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Michael P. Barker | 1626 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE MAILING DOWN THE STATE OF THE STATE OF THE MAILING DOWN THE STATE OF THE MAILING DOWN THE MAILING THE MAILI | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | l. lely filed the mailing date of this communication. O (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 30 O | Responsive to communication(s) filed on <u>30 Oct 07, RCE</u> . | | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | ·— | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>24-31</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>24-31</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examine | r. | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) ⊠ Acknowledgment is made of a claim for foreign a) ⊠ All b) □ Some * c) □ None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). | | | | |
| 1.⊠ Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the prior | rity documents have been receive | ed in this National Stage | | | | |
| application from the International Bureau | ı (PCT Rule 17.2(á)). | | | | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | d. | | | | |
| | | | | | | |
| Attachment(s) | _ | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal P 6) Other: | | | | | |

Art Unit: 1626

DETAILED ACTION

Claims 24-31 are pending in this Application. This case has been transferred from Examiner Karen Cheng to Examiner Michael Barker.

Request for Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 October 2007 has been entered.

Response to Amendments and Declaration

The cancellation of "C₃-C₁₂-cycloalkenyl" and "C₆-C₁₂-bicycloalkenyl" from the definition of R² in Claims 24-26 is sufficient to overcome the rejections previously put forth under obviousness-type double patenting, as well as the rejection under 102(b).

The Declaration under 37 CFR 1.132 filed 30 July 2007 is insufficient to overcome the rejection of Claims 24-31 based on 35 U.S.C. 103(a). This Office Action is not being made final because of the introduction of new rejections, infra.

Claim Rejections Maintained – 35 U.S.C. 103(a)

Applicant's showing includes a comparison of only one compound which was put forth as obvious over Applicant's claims. Applicant fails to compare numerous other compounds

Thus, the 103(a) rejections are

Application/Control Number:

10/532,529 Art Unit: 1626

listed in the WIPO Publication, WO 03/074491 A1, U.S. Patent, No. 5,480,897 (see also similar patents: U.S. Patent Nos. 5,556,988; 5,589,493; and 5,330,995), or WIPO Publication WO 02/059086, each of which teaches compounds differing only by the substitution of a

hydrogen for a fluorine, i.e. more than

maintained over the aforementioned references in the instances in which the compounds cited in the previous Office Actions differ from Applicant's only by the substitution of a hydrogen atom for a fluorine atom.

In light of the Patani reference and the reasoning set forth in Examiner Cheng's Non-Final and Final Rejections, Applicant's substitution of a hydrogen for a fluorine atom is not only well known in the art, it could also be considered optimization of known compounds through routine experimentation, such that the increase in efficacy is not necessarily an unexpected result. Patani, et al. notes that the concept of biosterism is considered to be qualitative and intuitive and further notes that the ability of fluorine atoms to replace hydrogen atoms is an effective method of exploring the affinity of an agent to the target site by virtue of its greater electronegativity, maintaining parameters such as steric size and lipophilicity. pp. 3147 and 3150. Accordingly Claims 24-31 are rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112, ¶2

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1626

Claims 29-31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, Claims 29-31 recites the limitation, "controlling", which can be construed as increasing or decreasing, thereby rendering the term ambiguous.

Claim Rejections - 35 USC § 112, ¶1

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 29-31 are rejected under 35 U.S.C. 112, first paragraph, because the Specification, while being enabling for specific fungal <u>infections in plants</u> (*Sphaerotheca fuliginea*, *Venturia inaequalis*, *Puccinia recondita*, and *Alternaria solani*), does not reasonably provide enablement for "controlling" *every* "unwanted microorganism". The Specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

As stated in MPEP 2164.01(a), "There are many factors to be considered when determining whether there is sufficient evidence to support a determination that a disclosure does not satisfy the enablement requirement and whether any necessary experimentation is undue."

<u>In re Wands</u>, set forth the following eight factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph:

- 1. The nature of the invention;
- 2. The state of the prior art;
- 3. The predictability or lack thereof in the art;

Application/Control Number:

10/532,529

Art Unit: 1626

- 4. The amount of direction or guidance present;
- 5. The presence or absence of working examples;
- 6. The breadth of the claims;
- 7. The quantity of experimentation needed; and
- 8. The level of the skill in the art.

8 USPQ2d 1400 (1988).

The invention is drawn to a method "for controlling unwanted microorganisms comprising an effective amount of one or more of. . ." the compounds found in **Claim 24**.

The state of the prior art, plant science, involves screening *in situ* to determine which compounds exhibit the desired fungicidal activities. There is no absolute predictability even in view of the seemingly high level of skill in the art. Applicant's Specification acknowledges that numerous thiazole(bi)cycloalkylcarboxanilides have fungicidal properties. However, there is no evidence in the prior art that one compound, a sub-genus of compounds, or a genus of compounds is capable of protecting every plant from every known fungus.

Because of the nature of unpredictability and the current state of the prior art, it is highly unlikely that the contemporary knowledge in the art would allow one of ordinary skill in this art to accept that the instantly claimed compounds or compositions thereof are capable of controlling every unwanted microorganism using the claimed compounds.

The only direction or guidance present in Applicant's Specification for a method for using compounds and compositions of Claim 24 in application to unwanted microorganisms is found at pp. 29-38 of Applicant's Specification. In each test, Applicant demonstrates certain of the claimed compounds' ability to protect a variety of plants from specific fungi, namely Sphaerotheca fuliginea, Venturia inaequalis, Puccinia recondita, and Alternaria solani. There is

Application/Control Number:

10/532,529

Art Unit: 1626

no evidence presented in the Specification that Applicant's compounds are capable of controlling

bacterial infestation in plants, nor any other microorganism, as they relate to plants. Thus it

cannot be said that Applicant's Specification teaches the use of Applicant's claimed compounds

in the control of every unwanted microorganism.

In view of the teachings above, the lack of guidance, workable examples, state of the

prior art and/or exemplification in the specification, it would require undue experimentation by

one of skill in the art to determine with any predictability, that the method would function as

claimed.

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael P. Barker whose telephone number is (571) 272-4341.

The examiner can normally be reached on Monday-Friday 8:00 AM- 5:00 PM. If attempts to

reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K.

McKane, can be reached at (571) 272-0699. The unofficial fax phone for this group are (571)

273-8300.

Mint BL

Michael P. Barker Patent Examiner, AU 1626 Technology Center 1600 (for) Joseph McKane

REBECCA ANDERSON PRIMARY EXAMINED

Supervisory Patent Examiner, AU 1626

Page 6

Technology Center 1600